

**REMARKS**

Claims 1-10 are pending in the application. Claims 1 and 2 have been withdrawn from consideration. Claims 3-10 are rejected. Claims 4, 5 and 9 are herein amended. No new matter has been entered.

**Amendments to the Specification**

The disclosure is objected to because on page 17, line 16 it is unclear what is meant by “thus allowing negative an ion generating metal(s)...”. Applicants herein delete the occurrence of the word “an” in the paragraph that starts on page 17, line 9.

Further, Applicants note that on page 19, lines 4-5 the reference character “56” has been used to designate both voids and the porous layer. Applicants note that the porous layer had previously been labeled with a 54. Applicants herein amend the paragraph starting on page 18, line 18 to recite a “~~porous layer 56~~ porous layer 54”.

**Claim Rejections - 35 U.S.C. §112**

Claims 4-5 and 9-10 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

In claim 4, line 8, the Examiner asserts that the phrase “such as silver nitrate, copper nitrate, or their combination” is indefinite. Similarly, in claim 4, line 9-10, the Examiner asserts that the phrase “such as silver sulfate, copper sulfate, or their combination” is indefinite.

Applicants herein delete the phrases “~~a metal nitrate such as~~” and “~~a metal sulfate such as~~”.

In claim 5, line 4, the phrase “the electrolytic process” lacks antecedent basis. Applicants herein amend this claim to recite “~~the~~ an electrolytic process”.

In claim 9, line 4, the Examiner asserts that the alternative expression of the Markush group is improper. The words --the group consisting of-- should be inserted after the word “from”.

Applicants herein make the requested amendment.

#### **Claim Rejections – 35 U.S.C. §103**

Claims 3 and 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over commonly assigned EP 1,207,220 in combination with Mayers et al. (U.S. Patent No. 6,540,901 B2)

The Examiner concludes that it would have been obvious to have modified the method of EP ‘220 with the step of doping the electrolyte liquid with a negative ion generating metal salt and depositing a negative ion generating metal from the negative ion generating metal salt on the anodized layer, because it is conventional in the art to treat an anodized surface with zirconium (Group IVB) or vanadium (Group VB) metal salt as taught by Mayers et al. (col. 3, lines 7-10 and lines 32-47).

Applicants respectfully disagree with this rejection, because there is shown no suggestion to combine the two references as cited.

Applicants note that, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success. (Manual of Patent Examining Procedure §2142). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

The Examiner asserts that "it is conventional in the art to treat an anodized surface with zirconium (Group IVB) or vanadium (Group VB) metal salt as taught by Mayers et al." However, according to Mayers et al., the reason for subsequent treatment ("post anodic dip") of its plate with aqueous solutions containing various inorganic salts is to improve specific lithographic printing properties of the substrate. According to Mayers et al., therefore, what is "conventional" is not to treat *all* aluminum substrates, but to treat only photolithographic substrates as such.

EP '220 is directed to a method of treating a surface of aluminum where the base material can be improved in antimicrobial properties, deodorant properties, and thermal and electrical conductivity. Because EP '220 is directed at cookware, rather than photolithographic plates, it requires none of the "conventional" treatments required by photolithographic plates.

Moreover, even if the references were properly combined, the limitation of treating the mother material with the doped electrolyte acid solution is not met by the cited combination. What is suggested by Mayers et al. is a post-anodic dip, which is subsequent to the anodic

treatment of the surface. There is no doping of the anodizing solution taught by the cited combination of references.

Therefore, Applicants submit that one skilled in the art would have found no reason to combine the cited references to try to reach the present invention, and would not have reached the present invention even if the references were properly combined.

Claims 4 and 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP 220 in combination with Mayers et al.

The Examiner concludes that it would have been obvious to have modified the method of EP '220 wherein the electrolyte liquid is doped with a negative ion generating metal salt and depositing a negative ion generating metal from the negative ion generating metal salt on the anodized layer because it is conventional in the art to treat an anodized surface with a copper metal salt (Group IB) and a zirconium (Group IVB) or vanadium (Group VB) metal salt as taught by Mayers et al. (col. 3, lines 7-10 and lines 32-47)

As above, Applicants disagree with this rejection because there is shown no suggestion to combine the two references as cited.

According to Mayers et al., the treatment is "conventional" not for those wanting to treat all aluminum substrates, but for those wanting to treat photolithographic substrates. EP '220 is directed to a method of treating a surface of aluminum where the base material can be improved in antimicrobial properties, deodorant properties, and thermal and electrical conductivity. Because EP '220 is directed at cookware, rather than photolithographic plates, it requires none of the "conventional" treatments required by photolithographic plates.

Therefore, one skilled in the art would have found no reason to combine the cited references to try to reach the present invention, and would not have reached the present invention even if the references were properly combined.

Claims 5 and 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP '220 in combination with Mayers et al. and Sheasby et al. (U.S. Patent No. 4,310,586).

The Examiner concludes that it would have been obvious to have modified the method of EP '220 by subjecting a mother material made of aluminum or aluminum alloy and covered at the surface with anodized layer to the electrolytic process in a phosphoric acid bath to modify the shape of the anodized layer because this would have enlarged the pores in the anodized layer as taught by Sheasby (cols. 11-20, Examples).

As above, Applicants respectfully disagree with this rejection, because there is shown no suggestion to combine Mayers et al. with EP '220 as cited.

As noted above, Mayers et al. teaches that its treatment is "conventional" not for those wanting to treat all aluminum substrates, but for those wanting to treat photolithographic substrates. EP '220 is directed to a method of treating a surface of aluminum where the base material can be improved in antimicrobial properties, deodorant properties, and thermal and electrical conductivity. Because EP '220 is not directed at photolithographic plates, it requires none of the "conventional" treatments required by photolithographic plates.

Sheasby et al. merely teaches a pre-anodic dip step of treatment for increasing the inner ends of substrate pores. However, the combination of Sheasby et al. and EP '220 fails to teach all the claimed steps, including wherein the electrolyte liquid is doped with a negative ion

generating metal salt and depositing a negative ion generating metal from the negative ion generating metal salt on the anodized layer.

Therefore, one skilled in the art would have found no reason to combine Mayers et al. with EP '220 and Sheasby et al. to try to reach the present invention, and would not have reached the present invention even if Sheasby and EP '220 were combined.

Claims 6-7 and 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP '220 in combination with Mayers et al. Claims 8-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP '220 in combination with Mayers et al.

The Examiner concludes that it would have been obvious to have modified the method of EP '220 with wherein the electrolyte liquid is doped with a negative ion generating metal salt to deposit a negative ion generating metal salt on both the anodized layer and the granular resin coating because it is conventional in the art to treat an anodized surface with a zirconium (Group IVB) or vanadium (Group VB) metal salt as taught by Mayers et al. (col. 3, lines 7-10 and lines 32-47).

As above, Applicants respectfully disagree with this rejection, because there is shown no suggestion to combine Mayers et al. with EP '220 as cited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

Application No. 10/715,403  
Attorney Docket No. 032114

Amendment under 37 C.F.R. §1.111

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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